

# Master Nanosciences et nanotechnologies

## Hybrid electronics 2 - flexible electronics

Responsable	Descriptions	Informations
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### LANGUE(S) D'ENSEIGNEMENT

Anglais

### CONTENU

Course taught in English

Electronic devices have evolved from rigid, planar, and packaged formats into highly flexible, curvilinear and unpackaged physical designs. Rapid development of soft/stretchable inorganic/organic electronics, wireless communication modules, biosensors, and soft encapsulating substrates underlies this ascension in recent years. As a result, we have observed advances in system level mechanics with implications for emerging biomedical devices, human-machine interface designs, e-skins, prosthetics, surgical/nonsurgical robotics, plastronics and flexible optical instruments for imaging and telecommunication. After more than two decades of academic and industry research, this new class of electronics is poised to have commercial impact. During this class, we will detail the different fabrication techniques, characterization and applications of this new kind of electronic devices.

Contents:

Soft and Stretchable electronics: Challenges, Applications and Future

Directions

Organic electronics

### VOLUME HORAIRE

- Volume total: 18 heures
- Cours magistraux: 12 heures
- Travaux dirigés: 6 heures

### CODES APOGÉE

- SNNC52FJ [ELP]

### M3C

Aucune donnée M3C trouvée

### POUR PLUS D'INFORMATIONS

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